REMARKS

Claims 24 and 38 have been amended to correct the informalities noted by the Examiner.

Claims 21 – 41 were rejected under 35 U.S.C. 112, first paragraph. In particular, the Examiner states at page 3 of the Office Action mailed May 26, 2006 that, "the specification shows taking a number of MPEG frames from the MPEG video stream to create a processed frame where the MPEG video stream has movement information embedded within it (page 8)". The Applicant would direct the Examiner to the very next sentence, "The movement information is used in step 406 to decompress the MPEG video stream into a series of digital video frames." Therefore, in this instance, the movement information is used to decompress the MPEG video frames into uncompressed video frames the content of which are subsequently used for enhancement of a particular video frame. Furthermore, the Examiner states on page 8 of the Office Action that, "The specification further discloses "once the video frames and movement information are available, the process of image enhancement of a block can continue" (page 9). The Examiner has misconstrued the context of the use of movement information since on page 8 line 34 to page 9 line 2, "With operations such as a zoom operation, only a block of pixels is processed at one time, and only movement information is necessary for the pixels in that block". Therefore, the "movement information" that the Examiner refers is used to decompress the MPEG video in one use and in another use is only a subset of frame based information available that is used in "movement" based enhancements, such as a zoom operation.

For example, on page 9, line 20,

"Alternatively, digital manipulation is performed on the frame or block in step 428, if the enhancement is complete. These manipulations include such things as contrast enhancement, luminance control, color adjustment, gamma correction, image sharpening, color saturation adjustment, and zoom along with such fanciful effects such as embossing, posterization, and warping."

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In this way, the zoom operation is but one of a suite of enhancements that do not expressly rely upon movement information.

In conclusion, the Applicant believes that claims 21 – 41 are supported by the specification and request that the Examiner withdraw the 35 U.S.C. 112 first paragraph rejection.

The Examiner has rejected a number of claims under 35 U.S.C. 103(a) as being anticipated by U.S. Patent 6,415,101 issued to deCarmo in view of U.S. Patent 6,493,872 issued to Rangan et al. deCarmo has been discussed in detail in previous responses and therefore will only be discussed in terms of the new rejection cited in the current Office Action. The Examiner on page 4 of the Office Action has acknowledged that,

> "deCarmo does not disclose:
> - enhancing the selected video frame by incorporating information included in the other digital video frames into the particular digital video frame
> - displaying the enhanced digital video frame without reference to the other digital video frames".

The Examiner cites Rangan in an attempt to cure the deficiency of deCarmo specifically citing col 20, line 65 to col 21 line 7, "adding data of identified numbers of chosen frame intervals to video frames shows incorporating information included in the **other** digital video frames into the particular digital video frames for enhancing the video frames". (emphasis added)

After careful consideration of Rangan, the Applicant respectfully disagrees with the Examiner for at least the following reasons. The "other" video frames that the Examiner refers are actually annotation data each of which is associated with a particular video frame of a video stream from which it is derived and therefore doe not represent information from "other" video frames. For example, at column 7 starting at line 19,

> "Once the video stream is in the domain of tracking module 13, an image entity in a fist bitmap image is selected to be tracked, and further frame-by-frame movement of the image entity is automatically tracked. *Tracking data associated with a tracked image entity is associated with the bitmap video stream via a second synchronous data-stream comprising the frame-by-frame coordinates of the tracked image entity. This output video stream comprises the original stream plus the synchronous data stream that*

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contains the tracking data and is illustrated (via directional arrow) as leaving module". (emphasis added)

The Applicant has provided the section relied upon by the Examiner below in order to facilitate further discussion.

"With reference to the stated objective of the present invention as previously described above, it was mentioned that the method of the present invention involves a second phase wherein *separate data streams, marked via the conventions above,* arrive at a user location after being sent via alternate mediums, such as one via cable broadcast, and one via a wide area network (WAN) delivery wherein, after receiving the streams, the user's equipment captures, re-synchronizes and combines the streams to be displayed for viewing as one annotated video stream."

In support of Rangan, the Examiner notes on page 5 of the Office Action, "adding data of identified numbers of chosen frame intervals to video frames shows incorporating information included in the other digital video frames into the particular digital video frames." In light of the above discussion and the claims amended to more clearly describe the invention, the Applicant believes that the information included in the other digital video frames mentioned by the Examiner is *not* information from other video frames in the same video stream **from which the particular one of the digital video frames for enhancement was selected.** The information provided in the annotation data stream is derived solely from the corresponding video frame in the video stream and not other video frames. Since the annotation data stream (marked via the conventions above) "re-synchronizes and combines the streams to be displayed for viewing as one annotated video stream", the data can only come from the respective video frame or else it could not be used to re-synchronize and combine the two streams.

To summarize, the Rangan does not use information from other video frames to enhance a particular video frame, but merely provides a secondary data stream derived from a "tracked" or primary video stream that provides synchronization information for specific video frames.
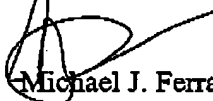
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The Applicant respectfully requests that the Examiner withdraw the obviousness type rejection of claims 21 – 41.

CONCLUSION

In view of the foregoing, it is respectfully submitted that all pending claims are allowable.

Should the Examiner believe that a further telephone conference would expedite the prosecution

of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,

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